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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,023	04/24/2001	Sung Lyong Lee	Q62058	4249

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EXAMINER

NATNAEL, PAULOS M

ART UNIT PAPER NUMBER

2614

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,023

Applicant(s)

LEE, SUNG LYONG

Examiner

Paulos M. Natnael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison, U.S. Pat. No. 6,591,292 in view of Cheney et al., U.S. Pat. No. 6,519,283.

Claim 1 is a method claim of claim 2 and, thus, Claim 1 is rejected for the same reasons as claim 2.

Considering claim 2, Morrison discloses the following claimed subject matter, note;

a) an OSD source remote controller for generating an OSD object display command on a screen, is met by Remote Controller 125, fig.2, which a user may utilize to enable an EPG to display and in response to the remote control signal, the System Controller 115 produces a signal OSD-RGB. (see col. 7, lines 63-67 and col. 8, line 66 through col. 9, line 10)

b) an OSD source for transmitting OSD display data by giving each OSD display data a peculiar ID in at least more than one OSD object unit and transmitting an OSD object ID

and display location information if there is an OSD object display command from said OSD source remote controller, is met by the transport System 25, Fig.2, and by the disclosure that "Data representing information displayed in the OSD menu is generated by system controller 115 in response to stored program guide information stored graphics information, and/or program guide and graphics information received via the input signal (e.g., StarSight data)..." (see col. 9, lines 4-9)

Except for;

c) a display apparatus for storing at least more than one OSD object display data received from said OSD source in a memory, reading OSD object display data having a corresponding ID from the memory in response to received OSD object ID and display location information, and displaying OSD object display data on a screen.

Regarding c), Morrison discloses separate storage devices 90 and 105 and display devices capable of displaying the OSD/EPG or electronic messages, as in figures 4-7. Morrison however does not disclose the details of a display device and whether the display device comprises a storage, or memory, or some sort of buffer memory. However, it is well known in the art that display devices comprise such storage devices.

In that regard, Cheney et al. for example discloses an integrated video processing system having multiple video sources and implementing pictures-in-picture with on-screen display graphics. Cheney discloses a video display device (Fig.6) comprising video buffer 684, MPEG decoder 654, memory control unit 652, etc. It would have been obvious, therefore, for those skilled in the art at the time the invention

was made to modify the system of Morrison et al. by providing the display device shown in fig.6 of Cheney in order to display blended video signal read from the memory or display buffer within the display device.

Considering claim 3, the OSD object display apparatus of claim 2, wherein the OSD source comprises:

- a) an MPEG source for supplying a detected MPEG transport stream to the display apparatus, is met by the transport decode 55, fig.2;
- b) an OSD generator for generating OSD display data in bitmap format, is met by the controller 115, fig.2;
- c) a register for storing data, is met by the Smart Card 130, fig.2;
- c) a controller for controlling the MPEG source, the OSD generator, and the register, is met by system controller 115 as well.

Considering claim 4, the OSD object display apparatus according to claim 3, wherein the register is an output asynchronous plug register, is met by the Smart Card 130, fig.2;

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Considering claim 5, a command input part for receiving a command signal from the OSD source remote controller and providing the command signal to the controller, is met by the remote input interface 120, fig.2.

Considering claim 6, the OSD object display apparatus of claim 2, wherein the display apparatus comprises:

- a) an MPEG decoder for decoding an MPEG transport stream and outputting image data, is met by the Transport Decoder 55, fig.2;
- b) a buffer for buffering OSD data, is met by Packet Buffer 60, fig.2;
- c) an overlapper for overlapping the image data and the OSD data and providing overlapped data to the screen, is met by Application Interface 70, fig.2;
- d) a controller for controlling the MPEG decoder, the buffer, the overlapper, the memory, and the screen, is met by system controller 115, fig.2;

Considering claim 7, the OSD object display apparatus according to claim 6, wherein the OSD object display apparatus further comprises: a display apparatus remote controller, is met by remote control unit 125, fig.2 or Remote controller 1125, fig.1;

Considering claim 8, a command input part for receiving a command signal from the display apparatus remote controller and providing the command signal to the 5 controller, is met by Remote Unit Interface 120 fig.2 or IR Receiver 1122, fig.1;

***Response to Arguments***

3. Applicant's arguments filed December 5, 2003 have been fully considered but they are not persuasive. Response to arguments follows.

Applicant's Arguments

- a) That Morrison fails to teach or suggest all of the limitations of claim 2.
- b) Morrison does not teach or suggest an OSD source for transmitting OSD display data by giving each OSD display data a peculiar ID...
- c) Morrison discloses that individual packets that comprise particular program channels are identified by packet identifiers (PID) in col. 8, lines 45-51, but these packet identifiers do not correspond to the peculiar ID claimed in claim 2, i.e., a peculiar ID for each OSD display data.
- d) Morrison does not disclose transmitting an OSD object ID and display location information if there is an OSD object display command from the OSD source remote controller. Instead, Morrison discloses transmitting the data itself each time, rather than an ID and display location information.

Examiner's Response

a) the rejection was based on 35 USC 103 not 35 USC 102 which requires all limitation be taught.

b) Morrison discloses a method and interface for incorporating program information into an electronic message. Morrison discloses a TV system with EPG comprising a controller 1110 including an OSD Processor 1117 which transmits the OSD\_RGB signal to a video signal processor 1155. (Fig.1) Morrison also discloses a Remote controller 1125 which send a control signal to the microprocessor 1110. In this case the OSD source is the microprocessor 1110. In Fig.2 Morrison discloses another embodiment that teaches a Remote Controller 125, fig.2, which the user utilizes to enable an EPG which in response the Controller 115 produces a signal OSD-RGB. (see col. 7, lines 63-67 and col. 8, line 66 through col. 9, line 10)

c) Given a reasonably broad interpretation, the OSD as nay other packet data, must have an ID in the packet with which it can be identified when transmitted from the source (microprocessor) to the decoders and display devices. Thus, the argument that the PID are not the same as "peculiar ID" is unpersuasive.

d) The claimed recites "an OSD source for transmitting OSD display data by giving each peculiar ID in at least more than one OSD object unit and transmitting an OSD object ID and display location information if there is an OSD object display command from said



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OSD source remote controller". The claim does not recite "not transmitting the data itself each time, but only the ID and display location information". Morrison discloses transmitting the OSD data and obviously some sort of display location information would be transmitted along with the data so that the display device "knows" where on the screen to display the OSD window and/or data. Location information is controlled by a controller such as 1110. (see also col. 6, line 58 through col. 7, line 3)

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stahl et al, U.S. pat. No. 6,665,020 discloses a digital television apparatus for controlling a peripheral device via a digital bus.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos Natnael  
February 20, 2004

  
**PAULOS M. NATNAEL**  
**PATENT EXAMINER**